

also measured, in the historians' accounts, by the controversies it generated in the media, in corporate boardrooms, in scientific journals and within government departments.

The curious thing, however, is that *Silent Spring* is apparently not much read any more. Historians of the environmental movement have dwelt at length on its impact, a few among them have offered potted biographies of the author, yet one is hard put to find in the published literature an intelligent summary and assessment of the book itself. And that is a pity, for *Silent Spring* is a truly remarkable work, a contribution to science that is worth reading—and re-reading—for its literary qualities alone.

For Rachel Carson the 'central problem of our age' was the 'contamination of man's total environment with substances of incredible potential for harm.' These were the new chemicals patented during and after the war, such as dichloro-diphenyl-trichloroethane (DDT), an insecticide that had found wide favor among farmers and scientists. DDT was only the most prominent of an array of pesticides synthesized by chemists for use on the farm and in the factory. Between 1947 and 1960, the output of pesticides in the U.S. jumped from 1.24 to 6.37 million pounds; moreover 'in the plans and hopes of the industry this enormous production [was] only a beginning.' Used for a worthy purpose—to increase food production by eliminating pests—these manipulated chemicals had become, in Carson's colorful language, 'elixirs of death,' a 'battery of poisons of truly extraordinary powers.' As she explained, chemicals applied to plants and trees slowly leached into the soil and water, thereupon entering the food chain. Passing from one organism to another, from insects and birds to fish and animals, they went on to enter the bodies of humans in repeated small doses. These chemicals, modeled in the laboratory with little regard to their impact on the natural world, thus constituted an ever-present if insidiously invisible danger to diverse forms of life.

The early chapters of *Silent Spring* describe these new chemicals, their applications and impact on soil, water, and forests. The book then moves on to a defense of nature against these modern and, in the author's view, unwarranted intrusions. A chapter on wildlife is followed by one on birds, centered on deaths of robins in parts of New England, poisoned by eating worms contaminated by insecticides sprayed on the elm tree—a perfect example of how the poisons worked their way up the food chain. It was this threat to a loved and familiar bird that the book's title evoked: 'the sudden silencing of the song of birds, the obliteration of the color and beauty and

interest they lent to our world,' such that 'spring now comes unheralded' by their return, with 'the early mornings strangely silent where once they were filled with the beauty of bird song.' This was certainly the reality in a few villages and towns here and there, but the work's power lay in its suggestion that this could become the norm *throughout* North America, unless humans worked quickly to control pesticides.

Only a little less loved than the robin was the eagle, America's national bird, and the salmon, that sprightly fish so lovingly memorialized in poetry and myth. Carson provides accounts of eagle kills and salmon deaths, before arriving finally at the threat to human life and salmon deaths, most dramatically illustrated by the in-through chemical ingestion, most dramatically illustrated by the increasing incidence of cancer. Here too the narrative is full of foreboding—Carson herself was diagnosed as suffering from cancer while working on *Silent Spring*—but the book ends with an offering of hope, the hope that biological methods of pest control would give humans a last chance to 'reach a destination that assures the preservation of our earth.' Biological methods had been tested in other countries; Carson quotes the distinguished Dutch entomologist C. J. Brejér in support of her own view that scientists had to commence

some very energetic research on other control measures, measures that will have to be biological, not chemical. Our aim should be to guide natural processes as cautiously as possible in the desired direction rather than to use brute force . . . Life is a miracle beyond our comprehension, and we should reverence it even when we have to struggle against it. . . . Humbleness is in order; there is no excuse for scientific conceit here.

Silent Spring is a marvel of popular and partisan science, rich in well-chosen examples and carefully detailed case studies drawn from specialized scientific works, here arranged and presented to the public in beautifully crafted prose. Beneath and beyond the facts lay a deeper philosophical argument, to the effect that nature was to be respected as a 'complex, precise and highly integrated system of relationships between living things which cannot safely be ignored any more than the law of gravity can be defied with impunity by a man perched on the edge of a cliff.'

Environmentalists had for some time been concerned with the protection of endangered species or beautiful habitats; it was *Silent Spring* which helped them move further, to an appreciation that 'in nature nothing exists alone,' that 'there are intimate and essential relations between plants and the earth, between plants and other plants, between plants and animals:' that nature was, in sum, 'an

nature-lover. Meanwhile independent India was restless, on the move, determined to conquer and master nature rather than submit silently to its laws. This called for the construction of steel mills and atomic power plants, not the organic farms and village woodlots which the Gandhians advocated. Likewise, Lewis Mumford's regionalist program, which had found ready adherents in the 1930s, had no place in an America that now took the globe as its oyster. E. F. Schumacher was also to battle unsuccessfully against 'a vision of a future when technology would ensure that there was plenty for all'—as his biographer tells us, 'no one was [then] interested in listening to an economist who told them that [their] future was built on dreams.' Incomprehension, indifference and hostility were what faced those who dared challenge the age of ecological innocence, a phase which stretched from the end of the Second World War to the last quarter of 1962. It was in that year that the second wave of environmentalism announced itself through the unlikely medium of a newly published book.

The Ecology of Affluence

THE SIGNIFICANCE OF *SILENT SPRING*

Put two historians in a room and you have a debate; put a couple more and you have a cacophony of discordant voices. In a tribe notorious for disputation and disagreement, there is a surprising unanimity on what begat modern environmentalism. 'The landmark book *Silent Spring*,' writes Ralph H. Lutts, 'played a vitally important role in stimulating the contemporary environmental movement.' Stephen Fox goes further: *Silent Spring*, he says, 'became one of the seminal volumes in conservation history: the *Uncle Tom's Cabin* of modern environmentalism.' Kirkpatrick Sale is more categorical still; he quotes a stirring paragraph from the preface of the book in question, and adds: 'With those angry and uncompromising words, it can be said that the modern environmental movement began.'

Silent Spring was the work of Rachel Carson, a biologist who had worked for years with the U.S. Fish and Wildlife Service, and was the author previously of two best-selling but non-controversial books on the sea. The influence of her third book might be judged by numbers: by the fact that *Silent Spring* sold half-a-million copies in hard cover, the fact that it stayed thirty-one weeks on the *New York Times* bestseller list, the fact that it was quickly published, in English or in translation, in some two dozen countries. The book's impact is

intricate web of life whose interwoven strands lead from microbes to man.' The interconnectedness of all life called for a modest, gentle and cautious attitude toward nature, rather than the arrogant, aggressive and intrepid route taken by synthetic chemistry and its products. Otherwise the web of life could very easily become the web of death.

Silent Spring's impact was not, of course, contingent on an acceptance of this philosophy of nature, for the facts of pesticide abuse and its consequences for wildlife and humans spoke for themselves. The book, noted a historian twenty years after its publication, found a constituency broader 'than that enjoyed by any previous environmental issue. Never before had so diverse a body of people, from bird watchers, to wildlife managers and public health professionals, to suburban homeowners, been joined together to deal with a [common] threat.' Early admirers of *Silent Spring* included the secretary of the interior, Stewart Udall, and President John F. Kennedy himself, whose Scientific Advisory Committee put out a report endorsing Carson's conclusions.

The consequences of the book were far-reaching. In the wake of *Silent Spring* towns 'reconsidered their foolish herbicidal assaults' on avenue shrubs and trees; citizens and officials became more alert to potential fish kills in rivers; senators and congressmen were energized to make pesticide production a subject for political debate and legislative enactment; a federal committee on pest control was established to scrutinize new products; the U.S. department of agriculture, once a keen enthusiast for synthetic pesticides, outlawed several dangerous chemicals; dozens of states and the Federal Government outlawed the use of the most deadly of them all, DDT; and finally, a Pesticide Control Act of 1972 and a Toxic Substances Control Act of 1974 gave legal teeth to attempts to more closely control and monitor chemicals. Not since the appearance of John Maynard Keynes' *General Theory of Employment, Interest and Money*—which was published in England in 1937—did a single book have such a dramatic and simultaneous impact on public opinion, scientific research, and state policy.

The impact of *Silent Spring* was by no means restricted to the United States. Carson herself acknowledged foreign influences on her work; on the scientific side, the Dutch entomologist C. J. Brejér provided some key arguments, while the concept of 'food chain,' used in the book to such telling effect, had first been elaborated by the great Oxford ecologist Charles Elton, an authority several times

quoted respectfully by the author. The book was dedicated to the Alsatian doctor Albert Schweitzer, begetter of the philosophy of 'reverence for life,' while its epigraph came from the English poet John Keats: "The sedge is wither'd from the lake, And no birds sing"—words which provided the book with its title and its most effective image.

Rachel Carson was no narrow nationalist, yet her debts to other cultures were to be duly returned, with interest. Translated into twelve languages, *Silent Spring* had a striking impact on the resurgence of environmentalism throughout Europe. A historian of Germany explains how in that country 'the translation of [this] landmark polemic stood as a best-seller for many months,' its 'echo seen in the sharp upsurge' of membership of conservation organizations. A sociologist of Sweden writes that in his country 'it was Carson's book that served to usher in the modern era of environmental debate in the continent, the publication of the book provoked a furious debate in the House of Lords; outside that august body, it came to the attention of the biologist Julian Huxley. Through reading *Silent Spring* Huxley realized that in Britain too the new insecticides and herbicides were decimating plant and animal life; when he communicated this to his brother Aldous, the famous writer remarked that 'we are losing half the subject-matter of English poetry,' a comment that—had it reached her—would have greatly pleased Carson.

In the American context, *Silent Spring* is best compared to George Perkins Marsh's monumental *Man and Nature*, likewise a model of scientific clarity and exhaustiveness, and likewise a call to action aimed at scientists as well as to the public at large. It is unlikely that Rachel Carson herself thought of this comparison. For the author of *Silent Spring* wrote as if unaware of the first wave of environmentalism, as if there did not exist an authentically American tradition of respect and reverence for the integrity of nature. John Muir admired George Perkins Marsh, Aldo Leopold honored Muir, but Carson does not mention any of the great trio that preceded her. Her book did not go back beyond the Second World War, the event which set in motion the production and dissemination of the chemicals which were her immediate concern. This focus was understandable, but it is notable nonetheless that she fails to acknowledge that her nature philosophy had such a distinguished pedigree. Her silence in this regard is testimony perhaps to the hold of the Age of Ecological Innocence, which seems to have so effectively wiped away the memory and heritage of the first wave of environmentalism.

WAVES WITHIN THE WAVE

The Environmental Debate

Early in her book, Rachel Carson identified two reasons for the lack of awareness with regard to the new chemicals. 'This is an era of specialists,' she explained, 'each of whom sees his own problem and is unaware of or intolerant of the larger frame into which it fits. It is also an era dominated by industry, in which the right to make a dollar at whatever cost is seldom challenged.'

Carson herself was more concerned with the specialists, her book an extended polemic against narrow-minded chemists by one who was obliged on account of her own training to be always mindful of the 'larger frame.' Chemical controls, she wrote, 'have been devised and applied without taking into account the complex biological systems against which they have been blindly hurled.' Her remarks are laced with sarcasm—e.g., 'the chemists' ingenuity in devising insecticides has long ago outrun biological knowledge of the way these poisons affect the living organism'—and her book ends with an utter condemnation of the science of specialists:

The concepts and practices of applied entomology for the most part date from the Stone Age of science. It is our alarming misfortune that so primitive a science has armed [itself] with the most modern and terrible weapons, and that in turning them against the insects it has also turned them against the earth.

This theme was underlined by Julian Huxley in his foreword to the British edition of *Silent Spring*. Pest control, he wrote, 'is of course necessary and desirable, but it is an ecological matter, and cannot be handed over entirely to the chemists.' Like Carson, Huxley was a biologist, schooled in a science that in three major respects differs from the disciplines of physics and chemistry. First, biologists are taught to look for interdependence in nature, viewing individual life forms not in isolation but in relation to one another. Ever since Darwin, biologists have also been oriented toward a longer time frame, thinking in aeons and generations rather than months and years. Finally, biologists have a direct professional interest in species other than humans; as ornithologists, botanists and zoologists, they are, willy-nilly, more alert to the interests of bird, plant or animal life.

Inspired by Carson, though sometimes following lines tangential to hers, other biologists also came to play a disproportionate role in shaping the environmental debate of the sixties and seventies. Environmental 'classics' that appeared in the decade following *Silent*

Spring include Raymond Dasmann's evocation of the threatened beauty of a great American state; Paul Ehrlich's grim prediction of collective human suicide through over-breeding; Garret Hardin's equally despairing parable of how human society would self-destruct through aggressive competition over nature and natural resources; and Barry Commoner's urbane extension of Carson's attack on one-eyed science, where atomic physics was placed alongside synthetic chemistry. All these works were written by biologists, and all had apocalyptic titles: *The Destruction of California* (Dasmann); *The Population Bomb* (Ehrlich); *The Tragedy of the Commons* (Hardin); *The Closing Circle* (Commoner).

These works were closely followed in Europe, but in that continent too home-grown biologists were to emerge as major spokesmen for the new environmentalism. In Sweden the microbiologist Bjorn Gillberg and the biochemist Hans Palmstierma came to prominence in the late sixties as authors of scholarly studies on chemical hazards as well as of numerous popular articles in the press. Their counterpart in the Netherlands was C. J. Brejér, a friend of Carson who in 1967 produced his own influential version of *Silent Spring* entitled *Zilveren Sluiers en Verborgene Sevaeren* (Silver Veils and Hidden Dangers). Among the first to ring the alarm bells in the United Kingdom were Eric Ashby, F. Fraser Darling, C. H. Waddington and Julian Huxley, all eminent biologists with a more than professional interest in protecting the environment.

This is not to say that only biologists contributed to the burgeoning literature and intensifying public debate. E. F. Schumacher, still a dissident among economists, found his moment had arrived in 1973 when he published *Small is Beautiful*, a book much admired for its espousal of a 'Buddhist' economics based on 'appropriate' technology—that is, machines and production processes that would be cheap, decentralized, use little energy, and be sensitive to the environment. Schumacher had been deeply influenced by Gandhi, and by a trip he made to India in the early sixties (see box). Important contributions also came from the California historian Lynn White Jr. and the Norwegian philosopher Arné Naess, both concerned with the ethical and religious aspects of our relations with nature. More influential than these single-authored works was the collaborative *Limits to Growth*, a study commissioned by the Club of Rome which argued on the basis of computer simulations that current trends in population growth, energy demand and resource consumption were pressing hard on the carrying capacity of the earth. Published in 1972, *Limits* appeared in thirty languages and sold some four million copies in all.

One man who saw his life's work vindicated by the new environmental consciousness was Lewis Mumford. Born in 1895, Mumford had lived long enough to influence the first wave of environmentalism, to welcome the second, and, not least, to protest vigorously against the age of innocence which came in between. In October 1962, weeks after Rachel Carson's book appeared, Mumford was due to speak at the Davis campus of the University of California. Although I have no conclusive proof, he must already have read *Silent Spring*—if not the whole book, at least the extracts that had appeared previously in the *New Yorker* (a magazine he too wrote for). In any

ECONOMICS AS WISDOM

The German-British scholar E. F. Schumacher explains what he means by an 'economics of permanence,' he invokes Gandhi, but not his follower J. C. Kumarappa, who back in 1945 had written a book with a tantalizingly similar title, 'The Economy of Permanence.'

From an economic point of view, the central concept of Wisdom is Permanence. We must study the Economics of Permanence. Nothing makes economic sense unless its continuance for a long time can be projected without running into absurdities. There can be 'growth' towards a limited objective, but there cannot be unlimited, generalized growth. It is likely, as Gandhi said, that 'Earth provides enough to satisfy every man's need, but not for every man's greed.' Permanence is incompatible with a predatory attitude which rejoices in the fact that 'what were luxuries for our fathers have become necessities for us.'

... The Economics of Permanence implies a profound re-orientation of science and technology, which have to open their doors to Wisdom... Scientific or technological 'solutions' which poison the environment or degrade the social structure and man himself, are of no benefit, no matter how brilliantly conceived or how great their superficial attraction. Ever bigger machines, entailing ever bigger concentrations of economic power and exerting ever greater violence against the environment do not represent progress: they are a denial of Wisdom. Wisdom demands a new orientation of science and technology towards the organic, the gentle, the non-violent, the elegant and beautiful. ... We must look for a revolution in technology to give us inventions and machines which reverse the destructive trends now threatening us all.

Source: E. F. Schumacher, 'The economics of permanence,' *Resurgence*, volume 3, number 1, May/June 1970, reprinted in Robin Clarke, editor, *Notes for the Future: An Alternative History of the Past Decade* (London: Thames and Hudson, 1975).

event, his message was entirely consistent with Carson's. Mumford first outlined the history of ecological abuse on the American continent, beginning with the pioneers and culminating in the polluting epoch of what he, following Patrick Geddes, liked to call 'carboniferous capitalism.' He asked his student audience to replace the reigning myth of the machine with 'a new myth of life, a myth based upon a richer understanding of all organic processes,' a myth that would help humans work 'in co-operative relation with all the forces of nature.' Three years later, addressing a conference of ecologists, he urged scientists to place their particular concerns in a broader frame. 'When we rally to preserve the remaining redwood forests or to protect the whooping crane,' he said, 'we are rallying to preserve ourselves, we are trying to keep in existence the organic variety, the whole span of natural resources, upon which our own further development will be based.'

The historian Donald Fleming once remarked that the resurgence of environmentalism in the sixties allowed Mumford to 'reconstruct and amplify the themes of a lifetime.' The themes were the same, but a new urgency had now manifested itself in the sage's pronouncements. As he wrote in 1973, 'the chief effect of the regressive transformations that have taken place in the last quarter of a century [i.e. since the end of World War II] has been to change my conclusions from the indicative to the imperative mood; not "we shall" achieve a dynamic equilibrium [between humans and nature] but "we must"—if we are not to destroy the ecological balance upon which all life depends.'

In both Europe and North America, then, there was a prolific outcrop of environmentalist tracts in the years following the appearance of *Silent Spring*. Some of these works were sober and scholarly, others passionate and polemical. Several carried forward traditions characteristic of the movement's first wave. Thus the heritage of wilderness thinking was manifest in 'Neo-Malthusians' such as Garret Hardin and Paul Ehrlich, who worried that exploding human populations were dangerously encroaching on the living space of other species. It was also manifest in the ideas-centered work of Arné Naess and Lynn White, who like Muir and Leopold before them complained that most of their fellow humans sought to tame and dominate nature rather than understand or cherish her. Likewise, the traditions of scientific conservation were reinvigorated by the technocrats—as for instance the members of the Club of Rome—who sought to moderate world economic development toward a sustainable path, and by the more radical 'eco-socialists,' like Barry Commoner, who

called for alternate, non-polluting technologies and welcomed greater state control over the processes of production. Least visible of the older trends was 'Back-to-the-Land,' for by the 1960s peasants were no longer around in most of Europe to be defended or identified with. Yet the voices of Ruskin and Carpenter do resonate with Schumacher's *Small is Beautiful*, and with the *Blueprint for Survival*, issued in 1972 by the London-based *Ecologist* magazine: both works that not so much defended nature as mounted a wholesale attack on the excesses of industrial civilization. 'The principal defect of the industrial way of life,' announced the authors of *Blueprint*, 'is that it is not sustainable. Its termination within the lifetime of someone born today is inevitable—unless it continues to be sustained for a while longer by an entrenched minority at the cost of imposing great suffering on the rest of mankind.'

These modern manifestations of older traditions disagreed bitterly amongst themselves, but they are to be collectively distinguished from their common enemy, the ruling ideology of the age of innocence. Thinkers of the latter persuasion turned on environmentalists of all stripes, calling them 'backward-looking reactionaries,' 'prophets of doom,' and worse. It was not unknown for an environmentalist to be termed a CIA plant behind the Iron Curtain and a KGB agent in the free world. Socialists accused greens of deviating attention from the class struggle, capitalists accused them of seeking to impede the working of the market. The counterattack was led by economists who believed that the market and technology would find substitutes for any resource that went short or for rivers that ran dry. Paul Samuelson of the Massachusetts Institute of Technology, a future Nobel Prize winner, reacted sharply to the Club of Rome report, insisting that the 'wonders of the Industrial Revolution are not over.' Across the Atlantic, Wilfrid Beckerman of London University went so far as to predict that 'economic growth will continue uninterrupted for 2,500 years.'

Economists measure growth by aggregate statistical measures such as Gross National Product or Per Capita Income—numbers that often conceal a multitude of sins. Ecologists are more keenly interested in the components of growth, i.e. the technologies that produce goods, the processes by which these goods are consumed, the cumulative impact of production and consumption on the living systems of the earth. Their orientation made them less sanguine: where economists looked buoyantly forward to increases in GNP over the next thousand years, ecologists looked back critically at what had happened in the last twenty-five. And wherever they looked they saw or

smelt danger, caused by the effluents of the dangerously novel technologies elaborated in the epoch of innocence. One such ecologist, Barry Commoner, wrote unambiguously that—

It is economic motivation that has impelled the sweeping anti-ecological changes in the technology of production that have occurred since the Second World War. These changes have turned the nation's factories, farms, vehicles, and shops into seed-beds of pollution: nitrates from fertilizer; phosphates from detergents; toxic residues from pesticides; smog and carcinogenic exhaust from vehicles; the growing list of toxic chemicals and the mounds of undegradable plastic containers, wrappings, and geegaws from the petrochemical industry.

Here were listed some of the *effluents of affluence*, to use a term coined by the Spanish scholar Juan Martinez Alier. These effluents inspired the work of scientists such as Carson and Commoner, but they were also to generate a wider social response, an environmental *movement* in addition to an environmental *debate*.

THE ENVIRONMENTAL MOVEMENT: FROM IDEAS TO ACTIVISM

The University of Copenhagen, March 1969: a seminar on natural history is in progress, with some of Denmark's foremost scientists in attendance. A group of students enter the conference hall, lock the doors, and cut off the ventilation. Shouting slogans against pollution, they burn garbage they have brought with them, spray water from a polluted lake all over the participants, and hold aloft a duck doused with oil. 'Come and save it,' they scream at the scientists: 'You talk about pollution, why don't you do anything about it.' An hour of this hectoring and eerie symbolism elapses before the youths open the doors. But their protest is not finished: they drag the naturalists off to the next room. In this room was being held the founding meeting of NOAH, a body that would take Danish conservation beyond genteel discussion toward systematic social action.

This dramatic episode captures the distance between environmentalism's first wave and its second. Muir and Leopold, Marsh and Ruskin, were all 'activists' in their own way, yet their activism consisted for the most part in speaking and writing, in using the power of their words and the precision of their analyses to persuade others to join or follow them. Other conservationists worked closely with politicians and public officials, seeking to influence state policies toward forest protection or water management. Contemporary environmentalism has by no means eschewed these strategies

of propaganda and advocacy, yet its potential has been greatly increased by its resort to more militant forms of action.

In this respect, of course, environmentalism has resembled other social movements of the late '60s and '70s. That was a time when the North Atlantic world was hit by a flurry of citizens' initiatives, exemplifying a new and participatory approach to politics. Willing on this process were several social movements that were to acquire distinct identities of their own: the feminist movement, the peace movement, the civil rights movement, and the environmental movement.

Environmentalism shared some tactics of protest with these other movements, but it was also to forge innovative methods of its own. Marches and processions in defense of the wild or in opposition to pollution were influenced by the civil rights struggle. The 'teach-in,' used to such good effect by the anti-war movement, was the model for a nation-wide effort, Earth Day, held on April 22, 1970, and described as 'the largest organized demonstration in human history.' In thousands of cities and towns spread across America, an estimated 20 million participants affirmed their commitment to a clean environment by planting trees, clearing up garbage, or silently protesting with placards outside polluting industries. Before and after Earth Day have occurred hundreds of more localized protests against more focused targets. Faced with a noxious chemical plant or an illegal toxic waste dump, with the coming in of chainsaws into their favorite forest or a dam being built on their favorite river, environmentalists took to the streets and increasingly to the courts to obtain redress. To 'Plant more Trees,' and 'Save the Grizzly' was added a more threatening slogan: 'Sue the Bastards.'

The Swedish sociologist Andrew Jamison has written of the new social movements that they were primarily the work of 'young people impatient with the political methods of their elders;' they represented, in effect, a 'revolt of the young.' With feminism and the peace movement, environmentalism was also driven by the energy and idealism of men and women in their twenties and thirties. But it did enjoy one clear advantage over the other movements: it was less divisive. Feminists would be accused of breaking up homes, civil rights workers of dividing black from white, peaceniks of ignoring the vital security interests of the nation. But in the U.S. at least, hundreds of thousands of citizens who suspiciously stayed away from those movements readily flocked to the green banner. When, after Earth Day 1970, the newsmagazine *Time* put Barry Commoner on its cover, it called him the 'Professor with a Class of Millions.' The mood of the times enabled scientists like Commoner and Ehrlich to command an

audience far greater than that of the university classroom. This wider support for environmental concerns could lend itself to a cynical interpretation. Environmentalism, suggests the sociologist Denton E. Morrison, 'came as something of a relief to a movement-pummeled white, middle-class America and its representatives in the power structure. The environmental movement especially seemed to have potential for diverting the energies of a substantial proportion of young people away from more bothersome movements and into [groups] that seemed to stand for something close to Country, God, Motherhood and Apple Pie, and that, at worst, [was] clearly the safest movement in town.'

It is unquestionably true that of the 'new' social movements environmentalism alone has grown steadily in support and influence. Table I captures elements of this growth in statistical terms; it mentions but four conservation groups, but there are numerous others which have grown in membership strength in these past decades. An estimated 14 million Americans, or one in every seven adults, are members of one or other environmental organization. Likewise, in both Britain and Germany some 5 million people are now involved as citizens in environmental pressure groups. And in the Netherlands the foremost nature protection forum, the Vereniging tot Behoud van Natuurmonumenten, has increased its membership from 235,000 to 700,000 between 1980 and 1992.

Table I
Membership of selected U.S. conservation organizations
(in thousands)

Organization	Year				
	1966	1970	1980	1985	1991
Sierra Club	39	113	165	350	650
Audobon Society	41*	120	400	450	600
Wilderness Society	27**	54	50	100	350
National Wildlife Federation	272	540	818	825	5600

* figure for 1962 ** figure for 1964

Sources: Stephen Fox, *The American Conservation Movement: John Muir and His Legacy* (1985); Kirkpatrick Sale, *Green Revolutions: the American Environmental Movement, 1962-92* (1993).

This impressively large constituency can hardly be explained by the theory that environmentalism represents a 'safety valve' to defuse more threatening forms of collective action. Rather, the expansion of the mass base of the environmental movement is more plausibly related to corresponding changes in economy and society. For as the affluent society grew more affluent still, its members yearned for more arresting goods to consume. By the mid-sixties, cars, refrigerators and washing-machines had become commonplace, but holidays in the wild were not. The shift to a five-day week meant that consumers had both money and the means to travel. They now wished to escape, if only for a weekend or two, from their everyday milieu of factory or farm, city or suburb. Nature, whether in the form of forests to walk through, beaches to swim from, or mountains to climb and recline upon, provided the perfect—since temporary—antidote to industrial civilization. In 1964 a German magazine captured these manifold attractions of nature to the city-dweller:

Here in Nature's reposed and silent forest, where there are no rows of houses, no noise of motors, no advertising lights, no machines and bank books, here, where the day-in, day-out, nerve-deranging concatenation of all doing with money . . . lies far behind us, the deepest essence of man, his soul and his spirit steps into its own. This value is not to be measured by money, and moreover [it] is granted free, without price and service charge.

[translated from the German by Raymond H. Dominick III]

This message had a captive audience; between 1957 and 1972 the proportion of Germans who took vacation trips of a week or more rose from 36 per cent to 53 per cent. Nor was Germany exceptional; in Sweden, the increase in free time meant that 'more Swedes wanted to hunt, fish, bird-watch and collect berries, mushrooms and wild flowers in the forest.' In a nation of only 8.5 million people, as many as 600,000 came to own country cottages. In their working life these Swedes were caught up in 'the landscape of industrial production,' ruled by 'rationality, calculation, profit and effectiveness,' escaping on holidays and weekends to 'another landscape of recreation, contemplation, and romance.' All over the industrial world, as the historian Samuel Hays points out, 'natural environments which formerly had been looked upon as "useless" waiting only to be developed, now came to be thought of as "useful" for filling human wants and needs. They played no less a significant role in the advanced consumer society than did such material goods as hi fi sets or indoor gardens.'

This last quote seems to point to an uncomfortable gap between

the environmental debate and the environmental movement. Scientists and ideologues were concerned with resource shortages and the disappearance of species. They were critical of the direction of economic growth and its impact on local, national or global ecosystems. Set against these prophets of doom was the growing popular interest in the wild and the beautiful, which not merely accepted the parameters of the affluent society but was wont to see nature itself as merely one more good to be 'consumed.' The uncertain commitment of most nature lovers to a more comprehensive environmental ideology is illustrated by the paradox that they were willing to drive thousands of miles, using up scarce oil and polluting the atmosphere, to visit national parks and sanctuaries; thus using anti-ecological means to marvel in the beauty of forests, swamps or mountains protected as specimens of a 'pristine' and 'untouched' nature.

The environmental groups fussed little about this gap between the prophets and the people. They were glad enough with the massive surge in their membership, which gave them the finances and legitimacy to push for legislative and political change. In the '70s and '80s these groups moved from activism in the streets and courts toward a more accommodating incorporation in the structures of government. Environmentalists began to rely heavily on the expertise of scientists and lawyers who could work with rather than work against industry and government. As legislation was drafted for protecting nature or controlling the effluents of affluence, these specialists collaborated with state officials in fixing the permissible standards for industrial emissions, and identified particular species and habitats for designation as 'protected' or 'endangered.' In preparing briefs for legislators and sending forth emissaries to sit on scientific committees, the environmental movement helped set up and (in time) staff government departments, most notably the Environmental Protection Agency, which with 18,000 employees is currently the largest civilian arm of the U.S. government.

The routinization and professionalization of the environmental movement has in recent years generated a counter-movement, a struggle to return environmentalism to its confrontational past. In the U.S. this radical reaction has been led by the group Earth First! The group's founder, Dave Foreman, remarked some years ago that 'too many environmentalists have grown to resemble bureaucrats—pale from too much indoor light; weak from sitting too long behind desks; co-opted by too many politicians.' Warning his colleagues against 'playing the games of political compromise the industrial power-brokers have designed for us,' Foreman thought the 'time has come to

translate the non-violent methods of Gandhi and Martin Luther King to the environmental movement.' 'We must place our bodies,' he said, 'between the bulldozers and the rain-forest; stand as part of the wilderness in defense of herself; clog the gears of the polluting machine; and with courage oppose the destruction of life:' injunctions Foreman and his group have since carried out at different locations in the American West.

In Europe too, techniques of civil disobedience have come back into fashion among a section of environmentalists. An anti-road campaign in Britain, gathering momentum as I write, has protected old houses, forests and farms by blocking bulldozers and setting up protest camps. These militants seek to defend not an undisturbed wilderness but a composite rural culture remembered and honored in collective memory. But like Dave Foreman, anti-road protesters also acknowledge Gandhi to be a powerful influence—the 'fundamentals of his teachings form the backbone of my beliefs today,' to quote the British campaigner Chris Maile. Foreman and Maile are inspired by Gandhi, but we know that the Mahatma's strategies of civil disobedience were inspired in turn by an essay of Henry David Thoreau, and that his defense of the rural community drew abundantly on the works of John Ruskin and Edward Carpenter. The ideas and example of Gandhi have thus helped return these American and British radicals to their own half-forgotten traditions of dissent and moral authority: testimony, once more, to the global and cross-cultural character of the environmental movement.

RADICAL AMERICAN ENVIRONMENTALISM

In the lexicon of social movements, 'radical' is invariably opposed to 'reformist,' the latter standing for compromise and accommodation, the former for purity and militancy. The word is almost always used in self-definition by thinkers or activists who wish to distinguish themselves from trends they deride as less daring or more compromising than themselves.

In the context of American environmentalism, there are at least two legitimate claimants to the 'radical' label. The first is the strand in the wilderness movement known as 'Deep Ecology.' This dates its origins to an essay published in 1972 by the Norwegian Arné Naess, which called for environmentalists to embrace an ethic, termed *biospheric egalitarianism*, that would place humans on a more or less equal footing with other species. Biospheric egalitarianism would be a truly 'deep' ecology, in contrast to the 'shallow' ecology which

concerned itself merely with pollution or resource depletion without going to the deeper roots of the ecological crisis (see *box*). Recast in philosophical terms, this can be stated as the distinction between *anthropocentrism*, the belief that humans stand apart and above the rest of creation, and *biocentrism*, which rejects a human-centered perspective by looking at history from the perspective of other species and nature as a whole.

Naess' work has been controversial in his native Norway, where his campaign for the protection of wolves has angered farmers and his support for the ban on whaling alienated fisherfolk. Indeed, it

A PLATFORM FOR DEEP ECOLOGY

Arné Naess offers a set of eight principles for uniting deep ecologists: a platform first outlined by him in 1984 and revised several times since. This version is from 1993.

1. The flourishing of human and nonhuman living beings has intrinsic worth. The worth of nonhuman beings is independent of their usefulness for human purposes.
2. Richness and diversity of life forms on earth, including forms of human cultures, have intrinsic worth.
3. Humans have no right to reduce this richness and diversity, except to satisfy vital needs.
4. The flourishing of human life and cultures is compatible with a substantially smaller human population.
5. Present human interference with the nonhuman world is excessive, and the situation is worsening.
6. The foregoing points indicate that changes are necessary in the dominant way humans until now have behaved in their relation to the earth as a whole. The changes will, in a fundamental manner, affect political, social, technological, economic, and ideological structures.
7. The ideological change in the rich countries will mainly be that of increased appreciation of life quality rather than high material standard of living, in this way preparing [the way for] a global state of ecologically sustainable development.
8. Those who subscribe to the foregoing points have an obligation, directly or indirectly, to try to implement the necessary changes by nonviolent means.

Source: David Rothenberg, *Is it too Painful to Think? Conversations with Arné Naess* (Minneapolis: University of Minnesota Press, 1993), pp. 127–8.

might be said that the most faithful and energetic of his disciples are now to be found in and around the state of California. In the U.S., there already existed a tradition of reflection and activism in defense of the wilderness, a tradition that despite its submergence in the '40s and '50s was being discovered anew (see box). In 1967 Roderick Nash published his *Wilderness and the American Mind*, a book that re-presented the ideas of Muir and Leopold to a modern public. A steady stream of Muir biographies followed, and when Oxford University Press brought out a new edition of Leopold's *A Sand County Almanac* in 1973, it sold fifty times as many copies as had the original.

ON HOW THE FIRST WAVE OF
WILDERNESS THINKING IS INTEGRATED
WITH THE SECOND

A historical geographer's perceptive analysis of why Aldo Leopold's ideas resonate so deeply with the wilderness lovers of the present day:

Leopold's land ethic is immensely popular among purists because it successfully resolves four difficulties. First, the purist is encouraged to see himself as part of the advance guard for a higher level of civilization, which is a much more pleasant self-image than 'nature nut.' Second, Leopold's views on wilderness as a baseline fit very well with the axiom and corollaries of the wilderness ethic. Third, Leopold's fusion of the land ethic with the science of ecology lends the prestige of science to the purist's beliefs. Fourth and most important, geopietistic mystic experience gains a code of moral directives based on scientific fact . . . Science is used to justify the purist's numinous experience and to interpret this experience as a useful, satisfying moral code.

Source: Linda H. Graber, *Wilderness as Sacred Space* (Washington, D.C.: The Association of American Geographers, 1976), p. 50.

Arné Naess' distinction between shallow and deep ecology fitted well with this rediscovery of John Muir and company. It seemed to give a firm philosophical basis to the belief, already widespread among wilderness lovers, that the presence of humans was always and invariably a threat to other species. Deep Ecology found adherents within the scholarly community, with fine-grained discussions of the anthropocentric/biocentric distinction appearing in the scholarly literature. A new and influential journal, *Environmental Ethics*, placed the debate squarely in the center of the academic discipline of philosophy. Beyond the university, Deep Ecology was enthusiastically taken up by activists disenchanted by the gentle lobbying

efforts of the Washington professionals. Its influence is visible in the very title of *Earth First!*, the group that has most stridently captured this disaffection with incremental methods to protect nature. Elsewhere in the forests of North America, militant efforts to defend the wild have also been inspired by the tenets of Deep Ecology. One such place is the Canadian province of British Columbia where, as Catherine Caufield writes, radicals have

blockaded logging roads with fallen trees, boulders and their own bodies; buried themselves up to their necks in the paths of advancing bulldozers, and suspended themselves from trees, dangling a hundred feet off the ground for days at a time. Less frequently, they have engaged in controversial acts of sabotage, ranging from pouring sugar into the gasoline tanks of logging trucks, to disabling bulldozers, to rendering trees worthless—and dangerous—for milling by driving six-inch-long iron spikes into them.

These actions are mandated by the ethic that the interests of nature are as important as the interests of humans: that to put yourself in the path of an advancing bulldozer is to invoke the most radical traditions of philosophical thought and environmental action. Deep Ecologists, whether within the academy or outside it, see themselves as the intellectual, spiritual and political vanguard of American environmentalism. But this self-definition has not gone uncontested. Its critics accuse it of misanthropy and of a peculiar blindness of its own, which ignores environmental degradation outside the wild and the human suffering that is its consequence. Deep Ecologists are charged, with some reason, for ignoring the problems of social inequality, both within the countries of the North and between the North and the South. Within the United States itself, the wilderness movement has scorned the city, which it sees as the source of all that is modern, industrial, man-made, and hence *unnatural*. Indeed, as the sociologist Michael Meyerfeld Bell has pointed out, much of contemporary environmentalism derives from an 'ideology of urban abandonment and urban escape', resulting in a near-complete neglect of the ecological problems of city life. The critics of Deep Ecology draw attention to another and in their view more authentically radical strand, the *environmental justice* movement.

Where the nerve-centers of Deep Ecology are in the wild, environmental justice is firmly rooted in human habitations. The threats it fears are toxic waste dumps and landfills, the excretions of affluence that have to be disposed of somehow, and somewhere. An early and notorious case is of the unhappily named Love Canal in upstate

New York, the recipient of 43 million pounds of wastes produced by the firm of Hooker Chemicals.

Love Canal happens to pass through a white area, but other toxic waste sites have been overwhelmingly located in areas inhabited by minority communities. For example, more than 2 million tons of uranium tailings have been thrown onto Native American lands, in some cases causing rates of cancer twenty times the national average. Likewise, a study commissioned by the National Association for the Advancement of Colored Peoples estimates that almost 60 per cent of all African-Americans have been put at risk by hazardous waste dumps and landfills. The Alabama town of Emelle, whose population is four-fifths Black, receives wastes from all of forty-five states.

One of the first to blow the whistle on this process of effluent discrimination was the sociologist Robert Bullard. He found that in the city of Houston, where Whites comfortably outnumber Blacks, three out of four disposal sites had been placed in black neighborhoods. Bullard saw that 'the landfill question appears to have galvanized and politicized a part of the Houston community, the Black community, which for years had been inactive on environmental issues.' Indeed, movements of resistance to dangerous dump-sites have sprung up in numerous towns and counties across America. Lois Gibbs, who led the campaign to clean up Love Canal, helped set up a national co-ordinating body, the Citizens Clearinghouse for Hazardous Wastes (CCHW), which lists a staggering 4000 affiliated groups. Through demonstrations, press campaigns and lawsuits, these groups have worked to stop fresh sitings or have made industry and government accountable for the hazards posed by dumps that already exist.

These struggles are currently being chronicled by sociologists, but early reports from the battlefield all point to one striking feature: the leading role of women. The opposition to polluters has often been in the hands of housewives with no previous experience of social activism. Within the communities where wastes are being dumped, men are sometimes susceptible to blandishments of job or money, but women do not see the health of their children as a 'negotiable category.' A resister in southern Los Angeles explained her opposition to an incinerator thus: 'People's jobs were threatened, ministers were threatened, but, I said, "I'm not going to be intimidated." My child's health comes first; that's more important than a job.' Nor has this been purely a defensive operation; led by Lois Gibbs and the CCHW, the movement has also outlined, as alternatives to the production and dispersal of toxics, the 'four R's of recycling, reduction, reuse and reclamation.'

The struggles against hazardous wastes have contributed to a profound reorientation of American environmentalism. The political scientist Ken Geiser suggests that because the anti-toxics movement is 'so tightly rooted in the immediate experience of people's community and family life, it has an urgency and concreteness that is incredibly compelling.' The movement, he further notes, is composed largely of 'working-class and other lower-income people who would feel out of place at a meeting of a typical chapter of say, the Audobon Society or the Sierra Club.' For these 'new' environmentalists, the 'environment is not an abstract concept polluted and decreasing in beauty and scientific value. For many [of them] it is something which has already exposed them to hazards which are debilitating them and hastening their deaths.' Or, as an African-American activist more simply and sharply put it: 'The principle of social justice must be at the heart of any effort aimed at bringing Blacks into the mainstream of environmental organizations in the U. S. [We] must not misuse concern for endangered species as a way of diluting our responsibility to meet [the] basic need for human health care, food and shelter.'

THE GERMAN GREENS

Environmentalists of all kinds are now known as 'greens,' much as socialists of different tendencies were once known as 'reds.' The color has come to stand for nature, for life; its association with environmentalism so firmly rooted in the popular mind that in this book I have used it unselfconsciously and ubiquitously. Yet the usage is of surprisingly recent provenance. It dates to 1978, when a group of environmentalists taking part in local elections in Germany put forward candidates under the 'Green List,' *Grüne Liste Umweltschutz*. From that modest beginning arose a national party to which the label attached itself. It is this party and its later and conspicuous successes which have led to the identification of the color green with environmentalists in Germany, and everywhere else.

Formed in March 1979, the Green Party made a stunning entry into the Bundestag in the elections of 1983, the first new party to 'make it' to the German Parliament in sixty years. Its position was consolidated in the elections of 1987, and after a poor performance in the post-unification polls of 1990, in the 1994 elections as well. By this time Greens were also represented in most provincial parliaments, and even held office (in coalition with the social democratic party, the SPD) in one or two provinces. The German Greens offered a beacon for environmentalists in other European countries, who tried

to form political parties of their own. It has been a hard act to follow, and although in Belgium, Italy and Sweden green parties have since entered Parliament, they have not had quite the same impact. In the history of modern environmentalism, the German Greens stand out for their political victories and for the moral challenge they offer to the governing beliefs of industrial civilization.

The origins of the Greens can be traced, at one remove, to the efflorescence all over the North Atlantic world of social movements in the 1960s. After the end of the Second World War the German people had turned inward, persuaded by the ruling Christian Democratic Union to forget their horrific immediate past and work collectively toward the good, i.e. affluent, society. Chancellors Konrad Adenauer and Ludwig Erhard ruled over a nationwide consensus to the effect that political stability would generate prosperity. In the late '60s, however, a militant student movement sprung up, which used the Vietnam war to mount a more general broadside against authority and the 'Establishment.' Simultaneous with the students' struggle were a series of citizens' actions, the so-called *Bürger Initiativen* (BI), which for the first time in recent German history expressed an open skepticism of parties, politicians, and the state.

As in neighboring France and England, the protest of the students was at first captured in the number 1968, denoting a year, a mood, and a movement. The students' revolt played itself out in a while, but the BIs were rather more enduring. The Indian scholar Saral Sarkar, a longtime resident of Germany and a keen observer of its politics, suggests that the BIs passed through three distinct if chronologically overlapping phases. From 1969 to 1972 they operated mostly as 'one-point actions,' a multitude of local efforts to stop damaging industries, rehabilitate battered women and drug addicts, and construct playgrounds and schools without waiting for the government to do so. At this time the BIs took up a wide array of causes before finding 'its predominant theme in ecology.' This sharpening of focus was helped along by the formation, in Frankfurt in 1972, of a federal union of BIs, with more than a thousand registered groups and a membership of over 300,000 individuals.

The controversy over nuclear power emerged as central to this redefinition of a dispersed network of citizens' initiatives as the 'ecology movement.' Following the oil price hike of 1973, West Germany embarked upon an ambitious—but to many citizens reckless—expansion of its nuclear industry. New plants were feared for their contributions to pollution, for their links to the armaments industry, and

for the shroud of secrecy which surrounded them. Opposition to atomic energy as a 'sellout of the future' brought under one banner farmers whose lands and homes would have to make way for the new nuclear power plants with the educated middle-class of the cities, for whom this risky and potentially lethal technology became the 'very embodiment of socio-economic development gone wrong.' 'The fear of the people,' wrote a Hamburg correspondent in November 1973,

is today ranged not only against the danger from nuclear power plants themselves, but primarily against the industrial concentrations which are necessarily connected with the massive energy production. . . . If the unrestrained industrial growth is not stopped, then in the course of the next few years we shall experience the destruction of our ecology and with it the poisoning of the water and air of Hamburg in an unprecedented and unimaginable scale. It would not suffice any more to see "environmental protection" in protests against carelessly thrown away banana skins.

As elsewhere, protesters against polluting industries took readily to the streets. The '70s in Germany were peppered with demonstrations and strikes against new nuclear plants and older chemical factories. Keeping pace with civil disobedience were the writings of intellectuals who promoted a society greener than the one they found themselves in. When the established political parties continued to keep their distance, environmentalists thought of directly representing themselves. From 1977 they began putting up candidates at local and municipal elections. These regional efforts crystallized in an 'alternative political alliance,' or what we now know as the Green Party. In the new formation from the beginning was Petra Kelly, a young and highly personable woman of mixed German-American parentage. Kelly hoped the party would be 'a lobby for all those who have no lobby.' Others were more specific. The Green Member of Parliament Helmut Lippelt recalled the party as having

attracted conservatives concerned about protection of the environment; Christians concerned about the destruction of creation; educated liberals who had learned about global ecology; technicians with knowledge of high-risk technologies; socialists concerned about the fallouts of capitalism; and, of course, the new Marxist-Leninists, waiting for the true left party and examining whether perhaps they could educate *Die Grünen* to become just that party.

The journalist Werner Hülsberg provides another exhaustive listing, not necessarily incompatible with the first. The party drew into

its fold, he writes, 'farmers whose existence was threatened, radical-democratic doctors, left-liberal school teachers, critical trade unionists, bored office workers, young people without any future, radicalized women, nature-lovers, freaked-out hippies, militant animal rightists and a whole host of mueslies (health-food addicts) . . .'

This mother-of-all-rainbow coalitions sent forth some of its members to the Bundestag in 1983, after the Greens had unexpectedly crossed the threshold 5 per cent of the popular vote which qualified them for representation. Their diversity marked them out from the dourly homogeneous parties which sat across them. The most charismatic of the Green MPs, Petra Kelly, thought this was their strength. 'The variety of currents enriches our party,' she remarked, for 'I don't want to exclude communists and conservatives, and I don't have to. One current learns from the other. There is no mutual destruction, but a convergence of views. That's what is new about our movement.'

These hopes were illusory, for a political party needs to be rather more single-minded than a social movement. When the party was faced with the prospect of forming provincial governments with the well-established SPD, the whiff of power brought to the fore an apparently irreconcilable opposition between two groups, dubbed in journalistic shorthand as the Fundis (fundamentalists) and the Realos (or realists). Where the Fundis rejected any thought of Green participation in government, seeing it as the final sell-out to the Establishment, the Realos believed they owed it to their voters to responsibly incorporate Green ideals in governance. The Fundis thought little of parliamentary work, preferring to canvass among local groups and the citizenry at large. The Realos on the other hand welcomed the attention paid by the media to their new and distinctive voice in parliament, and accordingly gave importance to televised speeches as well as to closed-door committee work. These differences in political tactics masked deeper ideological divisions too. Thus the Fundis were wholly opposed to the market, the epitome to them of greed and avarice; the Realos argued that since the market was here to stay the task was to tame and control it, not to turn one's back on it.

The Fundis were, and are, themselves of two kinds, each drawing on a rich historical tradition. On the one side were the socialists-turned-ecologists, colored reddish-green so to speak, contemporary carriers of the German brand of revolutionary communism once associated with such figures as Rosa Luxemburg and Karl Liebknecht. These eco-socialists rejected industrial capitalism but nourished the hope that a future socialist society would be more gentle on the environment (see *box*). On the other side were the agrarian romantics,

colored deep green, who offered as their alternative to industrial society the decentralized rural utopia dreamt of by countless German poets down the centuries. But both types of Fundis stood, in the words of the philosopher Rudolf Bahro, for the 'radical reversal of

SOME PRECONDITIONS FOR RESOLVING THE ECOLOGY CRISIS

In a talk at Freiburg in 1979, the philosopher Rudolf Bahro, an erstwhile East German dissident who became a leading member of the 'Fundis' faction of the West German Greens, outlined some pretty radical solutions to the ecology crisis. His list makes for an intriguing contrast with the principles outlined by Arné Naess, quoted earlier. While Naess lays more stress on ethical and value change, Bahro, and the German Greens generally, focus somewhat more on changes in existing patterns of production, consumption and distribution.

- The ecology crisis is insoluble unless we work at the same time at overcoming the confrontation of military blocs. It is insoluble without a resolute policy of detente and disarmament, one that renounces all demands for subverting other countries. . . .
- The ecology crisis is insoluble without a new world order on the North-South axis. And we must realize that our entire standard of living [in the North] is largely based on the exploitation and suppression of the rest of humanity. . . .
- The ecology crisis is insoluble without a decisive breakthrough towards social justice in our own country and without a swift equalisation of social differences throughout Western Europe. . . .
- The ecology crisis is insoluble without progress in human emancipation here and now, even while capitalism still exists. It is insoluble without countless individuals managing to rise above their immediate and compensatory interests. . . .
- If all this is brought to a common denominator, the conclusion is as follows: The ecology crisis is insoluble under capitalism. We have to get rid of the capitalist manner of regulating the economy, and above all of the capitalist driving mechanism, for a start at least bringing it under control. In other words, there is no solution to the ecology crisis without the combination of all anti-capitalist and socialist tendencies for a peaceful democratic revolution against the dominant economic structure. . . .

Source: Rudolf Bahro, *Socialism and Survival* (London: Merlin Books, 1982), pp. 41-3.

the capitalist industrial system,' a perspective from which Green participation in government was merely to 'clean the dragon's teeth and freshen its breath.'

The Fundis gave powerful stimulus to the Green party in its early years, but over time they found themselves increasingly at odds with the rank-and-file. An estimated 80 per cent of Green voters wanted their party to work with the SPD in bringing about legislation to check pollution and moderate energy use. The Realos found their most effective spokesman in Joschka Fischer, Green Minister of Environment in Hesse between 1985 and 1987, a votary of 'qualitative growth' who sought to temper and redirect industrial society toward a greener path. 'I am no longer motivated by utopias,' remarked Fischer in 1985, 'but by the description of existing conditions. The ecological crisis, the arms race, the rise in criminality—those are more than enough for me. I am no missionary with a promise of a new tomorrow . . . If we can take one step in the right direction, one step which moves us away from the abyss, then that is sufficient justification for the existence of the [party].' The language, consciously or unconsciously, is reminiscent of Mahatma Gandhi's, likewise a politician who combined a utopian vision with shrewdly practical ends, who liked to speak of the 'beauty of compromise' and of 'taking one step at a time.'

At the time of writing the Realos reign triumphant, with Fischer himself being one of the best-known and popular German politicians. Knowledgeable analysts accurately predicted the prospect of a SPD-Green coalition capturing the Bundestag in the 1998 election, thus ending nearly twenty years of rule by the conservative Christian Democratic Union. Three Greens have joined the Cabinet, with Joschka Fischer appointed the new Foreign Minister of the most populous, most prosperous and most influential country in Europe. This surely marks the highest point of a journey already singular in the history of global environmentalism. But let me conclude this assessment by asking, first: Why did the Greens rise to prominence in Germany and nowhere else? And second, what in the ideas of the German Greens is of real and lasting significance?

Why is there no Green party in my country, the American reader will ask. In fact there is one, founded in Minneapolis in 1984, but with little to show in the thirteen years it has been around. One hurdle the American Green Party faces is the vibrant presence of apolitical environmental groups such as the Sierra Club and the Wilderness Society, who seem already to have captured the loyalty of the environmentalist constituency. Another is the entrenched two-party

system, in which better equipped 'third' parties—the Socialists of Norman Thomas, the Progressives led by Henry Wallace, the Populists of George Wallace, and most recently Ross Perot's Reform Party—have failed to make a dent. The Federal Republic of Germany also has two dominant parties of its own—the CDU and the SPD—but smaller parties are given a decent chance by the system of proportional representation, through which a group commanding more than 5 per cent of the vote can enter Parliament. Proportional representation has allowed environmentalists to take the political route in Germany, an option foreclosed by the constituency-based system prevalent in countries such as the U.S. and the U.K.

To this political difference one must add a geographical one, viz. that West Germany was a front-line state in the Cold War. It faced the massed might of the Soviets across the Iron Curtain and was the unwilling home of thousands of NATO troops and their nuclear weapons. Germans were hence able to more starkly perceive the destructive power of industrial society—as compared, for instance, to isolated Canadians or insulated residents of the state of California—and to more readily embrace a caring attitude towards the earth. Not to be discounted either was the Nazi past, which has fostered a massive guilt complex among the ordinary and especially the educated German, an urgent and overpowering desire to atone for the crimes of a previous generation. This has unquestionably heightened their sense of responsibility to other cultures and later generations. Taking the idea of 'Limits to Growth' seriously, they have turned the searchlight inward, illuminating the ways in which their society sets an unworthy example to the rest of the world. 'The key to a sustainable development model worldwide,' writes Helmut Lippelt, 'is the question of whether West European societies really are able to construct their industrial systems in order to permit an ecologically and socially viable way of production and consumption.' That Lippelt does not include the U.S. or Japan is noteworthy, an expression of his, and his movement's, willingness to take the burden upon themselves. West Europeans should reform themselves, rather than transfer their existing 'patterns of high production and high consumption to eastern Europe and the "Third World" [and thus] destroy the earth.'

For the German Greens, economic growth in Europe and North America has been made possible only through the economic and ecological exploitation of the Third World. Rudolf Bahro is characteristically blunt: 'the present way of life of the most industrially advanced nations,' he says, 'stands in a global and antagonistic contradiction to the natural conditions of human existence. We are eating up what

other nations and future generations need to live on.' From this perspective, indeed—

The working class here [in the North] is the richest lower class in the world. And if I look at the problem from the point of view of the whole of humanity, not just from that of Europe, then I must say that the metropolitan working class is the worst exploiting class in history. . . . What made poverty bearable in eighteenth or nineteenth-century Europe was the prospect of escaping it through exploitation of the periphery. But this is no longer a possibility, and continued industrialism in the Third World will mean poverty for whole generations and hunger for millions.

Even the most hardheaded Reale acknowledges the unsustainability, on the global plane, of industrial society. Joschka Fischer, asked by a reporter where he planned to spend his old age, replied: 'In the Frankfurt cemetery, although by that time we may pose an environmental hazard with all the poisons, heavy metals and dioxin that we carry around in our bodies.' Or as a party document more matter-of-factly put it: 'The global spread of industrial economic policies and lifestyles is exhausting the basic ecological health of our planet faster than it can be replenished.' This global view, coupled with the stress on accountability, calls for 'far-reaching *voluntary* commitments to restraint by wealthy nations.' The industrialized countries, which consume three-fourths of the world's energy and resources, and who contribute the lion's share of 'climate-threatening gaseous emissions,' must curb their voracious appetite while allowing Southern nations to grow out of poverty. The Greens ask for the cancellation of all international debt, the banning of trade in products that destroy vulnerable ecosystems, and, most radical of all, for the freer migration of peoples from poor countries to rich ones.

Attentive to the rights of other nations and future generations, the Greens have also taken aboard the claims of the most disadvantaged section of their own society: women. By party mandate, fully 50 per cent of all officers and parliamentarians have to be women. During meetings and congresses, the roster alternates men and women speakers, rather than simply leave the floor open to those who are more aggressive or have louder voices (who would most likely be men). These policies had immediate results, with the number of women who voted for the Party increasing six-fold between 1980 and 1987. But Green feminism is not restricted to public fora: thus a 'Mothers' Manifesto' presented to the party has urged that the traditional concern with equal pay for equal work be enlarged to properly

compensate housewives who contribute, unpaid, roughly half of all social labor. It is these mothers, moreover, who have taken the lead in organizing 'ecologically responsible households.'

Their feminism in theory and in practice adds to the list of what marks the Greens out as the most daring political experiment of our times. When they appeared on the German stage a decade or more ago, the famously conservative prime minister of Bavaria, Franz-Josef Strauss, dismissed them as 'the Trojan horse of the Soviet cavalry.' But now even Strauss' CDU party has borrowed elements of the Green program, proof of the party's impact on the most recalcitrant of its opponents. For all their 'various shortcomings and difficulties,' notes the political scientist Margit Mayer, the Green Party has

transformed the political landscape of Germany. What used to be considered nonconventional, marginal and utopian demands of the Greens in the '70s—such as demands to end nuclear energy, end linear economic growth, bring about unilateral disarmament, or proportional representation of women in all spheres—are now discussed and even demanded by other parties in the political mainstream.

Mayer writes only of the impact in Germany, but of course the party has attracted considerable attention and acclaim all over the globe. It might justly be regarded as the finest achievement of the second wave of environmentalism, referred to by the respectful capital that sets it apart from its peers and contemporaries: the Greens, as distinct from all other kinds of greens.